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Birch Stewart Kolasch & Birch LLP P O Box 747 Falls Church, VA 22040-0747				WELLS, LAUREN Q
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 20040422

Application Number: 09/604,763  
Filing Date: June 26, 2000  
Appellant(s): KATAYAMA ET AL.

**MAILED**  
**MAY 06 2004**  
**GROUP**

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John W. Bailey  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 1/6/04.

**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) Status of Claims**

The statement of the status of the claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellant's statement of the issues in the brief is correct.

**(7) Grouping of Claims**

Appellant's brief includes a statement that claims 17-10, 22-29, 33 and 21 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) ClaimsAppealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

5,795,978                          Ansmann et al.                          8-1998

3846550                          Akrongold                          11-1974

4,788,054                    Bernhardt et al.                    11-1988

**(10)    *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-20, 22-29, and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Ansmann et al. (5,795,978) in view of Akrongold (3,846,550).

The instant invention is directed to a cosmetic comprising a dimerdiol ester of a monocarboxylic acid having 10-32 carbon atoms and/or a dimerdiol ester of a dicarboxylic acid.

Ansmann et al. teach emulsifiers particularly suitable for the production of storable, high viscosity and sensorially light oil-in-water emulsions which are for use in cosmetic and/or pharmaceutical formulations. Suitable oils for said emulsions include esters of linear and/or branched fatty acids with polyhydric alcohols, for example dimer diol or trimer diol, and/or Guebert alcohols. Suitable oils are disclosed as comprising 5-99% of the non-aqueous components of the emulsions. Exemplified are oil-in-water creams with vitamin E. The reference fails to teach the number of carbon atoms the fatty acids comprise. See abstract; Col. 1, lines 10-15; Col. 4, lines 39-56.

Akrongold et al. teach a cosmetic skin powder containing urea, an oil phase and an inorganic pigment. Oils that may be used in the powder include acids and alcohols which may be saturated or unsaturated, straight or branched and comprising 5-52 carbons. Acids included for said oils are oleic, stearic, isostearic and dimer acids, and esters thereof. See abstract; Col. 1, lines 24-60.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of Akrongold into the invention of Ansmann to obtain carboxylic acids or monocarboxylic acids of fatty acids having 4-34 carbon atoms because a) both references teaches esters of fatty acids as oils for use in skin care compositions; b) Ansmann teaches other fatty acid ester oils as comprising 6-20 carbon atoms; thus, given that Ansmann teaches other fatty acids ester oils as comprising 6-20 carbon atoms and given that Akrongold teaches that fatty acid esters can comprise 5-52 carbon atoms, one of skill in the art would have been motivated to teach the “esters of linear and/or branched fatty acids with polyhydric alcohols (for example dimer diol” of Ansmann, as comprising 5-52 carbon atoms.

Regarding the last 3 lines of claim 33, it is respectfully pointed out that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). See MPEP 2113.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ansmann et al. in view of Akrongold as applied to claims 17-20, 22-29, and 33 above, and further in view of Bernhardt et al. (4,788,054).

Ansmann and Akrongold are applied as discussed above. The references lack rosin.

Bernhardt et al. teach coating compositions comprising cosmetic emulsifiers and thickeners or viscosity modifiers. Suitable thickeners include ester gums which are semi-synthetic reaction products of rosin and a polyhydric alcohol. See abstract; Col. 8, line 38-Col. 9, line 16.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Bernhardt into the invention of the combined references and obtain monocarboxylic acids comprising rosin or hydrogenated rosin because a) the combined references and Bernhardt all teach cosmetic emulsions comprising fatty acid esters as cosmetic oils; b) Bernhardt teaches that rosin esters increase the viscosity of emulsions, thereby thickening them; thus, since the combined references teach their emulsions in the forms of creams and lotions, one of skill in the art would be motivated to teach the fatty acids of the combined references as rosin because of the expectation of thickening their products.

#### **(11) Response to Argument**

Appellant argues, “Ansmann ‘978 merely mentions that esters of linear and/or branched fatty acids with polyhydric alcohols, such as dimer diol” or “trimer diol” are examples of suitable oils”. This argument is not persuasive. The Examiner respectfully points out that it is well-established that consideration of a reference is not limited to the preferred embodiments or working examples, but extends to the entire disclosure for what it fairly teaches, when viewed in

light of the admitted knowledge in the art, to person of ordinary skill in the art. In re Boe, 355 F.2d 961, 148 USPQ 507, 510 (CCPA 1966); In re Lamberti, 545 F.2d 747, 750, 192 USPQ 279, 280 (CCPA 1976); In re Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 570 (CCPA 1982); In re Kaslow, 707 F.2d 1366, 1374, 217 USPQ 1089, 1095 (Fed. Cir. 1983).

Appellant argues, “ ‘dimer diol’ and ‘trimer diol’ discussed at column 4, line 49 of Ansmann ’78 are different compounds from “dimerdiol” as used in the present invention because Ansmann ‘978 defines ‘dimerdiol’ and ‘trimertriol’ in its column 3, lines 14-17 as compounds containing 18 to 36 or 18 to 54 carbon atoms obtained from the oligomerization and hydrogenation of unsaturated fatty acids”. This argument is not persuasive, as Appellant is mischaracterizing the reference. First, it is respectfully pointed out that col. 3 is directed to dimerdiols and trimer*triols*, whereas col. 4 is directed to dimerdiol and trimer*diols*. Second, it is respectfully pointed out that col. 3 and col. 4 define these compounds separately. The definition of col. 3 is not pointed out to define the compounds of col. 4. Specifically, it is respectfully pointed out that col. 4 defines dimerdiols and trimerdiools as “esters of linear and/or branched fatty acids with polyhydric alcohols (for example dimer diol or trimer diol)”, which is synonymous to the definition of dimer diols in the instant invention.

Appellant argues, “The dimer diol used in the cited art of Ansmann ‘978 is merely disclosed as belonging to polyols and there is no suggestion that it is related to a dimerdiol of the instant invention. Moreover, it appears that a ‘dimer diol’ as used in Ansmann is represented by the formula HO-Ar-O-Ar-OH, wherein Ar is ethylene”. This argument is not persuasive. First, it is respectfully pointed out that a dimerdiol is a polyol (i.e., polyhydric alcohol), as a “diol” refers to two hydroxy groups. Second, Appellant is merely asserting his opinion and providing

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no evidence of HO-Ar-O-Ar-OH. Third, the dimer diols of the instant claims do not exclude “HO-Ar-O-Ar-OH”. Fourth, Ansmann do not teach HO-Ar-O-Ar-OH, but broadly teach the dimer diol as a polyhydric alcohol.

Regarding Table 1, the Examiner respectfully points out that there is no disagreement that Col. 3 and Col. 4 are directed to distinct compounds.

Appellant argues, “in the patents 10-11 listed in Table 1, the terms ‘dimer diol’ and ‘trimer diol’ are disclosed, and are polysiloxanes and oligomers of terephthalic acid ester. In view of these disclosures in the patents 1-8 and 10-11 of Table 1, it is increasingly clear that the Ansmann ‘978 disclosure at column 4, line 49 in no way teaches or provides for the use of an acid ester of a dimerdiol, as is required in the instant invention”. This argument is not persuasive. It is respectfully pointed out that nowhere in column 4, does Ansmann teach the dimer diol as polysiloxanes and oligomers of terephthalic acid ester. Furthermore, in Col. 4 of Ansmann, as previously stated, the reference defines dimerdiol as “esters of linear and/or branched fatty acids with polyhydric alcohols (for example dimer diol or trimer diol)”.

Appellant argues, “Ansmann ‘978 also fails to disclose any specific compounds that are esters of linear and/or branched fatty acids with polyhydric alcohols”. This argument is not persuasive, as it is not commensurate in scope with the instant independent claims, which do not recite specific compounds.

Appellant argues, “Ansmann ‘978 additionally fails to disclose esters of dimerdiols”. This argument is not persuasive. As previously stated, Ansmann defines dimerdiol as “esters of linear and/or branched fatty acids with polyhydric alcohols (for example dimer diol or trimer diol)”).

Appellant argues, “Appellants submit that Ansmann ‘978 does not disclose a dimer acid. Ansmann ‘978 discloses an emulsifier that is a mixture of alkyl and/or alkenyl oligoglycoside and fatty alcohols”. This argument is not persuasive. Again, it is respectfully pointed out that the Examiner is not attempting to equate the compounds taught in col. 3 of Ansmann, which are a mixture of alkyl and/or alkenyl oligoglycoside and fatty alcohol, with those of the instant invention, but with the compounds of col. 4. of Ansmann.

Appellant argues, “Ansmann ‘978 notes that the improvement in the sensorial properties is attributable to the emulsifier and not the use of oil alone. From this passage one of ordinary skill in the art would know that the oils disclosed at column 4, lines 39-56 would not produce the improved sensorial properties alone”. This argument is not persuasive, as it has no relevance to the instant claims. The sensorial properties of Ansmann are of no relevance.

Appellant argues, regarding Akrongold, “The oil is disclosed as being acids and alcohols containing 5 to 52 carbon atoms. Specifically disclosed oils are esters of fatty acids as a genus, and limited numbers of fatty acid esters including isopropyl myristate and hexadecyl stearate. These specific examples are outside the scope of the esters of the present invention”. This argument is not persuasive. None of the instant claims, except claim 21, which is not included in the rejection over Akrongold, recite specific esters of fatty acids. The carbon length of the acids taught by Akrongold encompass those recited by the instant claims. Akrongold is merely relied upon to teach the state of the art of cosmetically acceptable carbon chain lengths for fatty acid esters, such as the dimer diols that taught by Ansmann (see above rejection).

Appellant argues, “since the disclosure of Akrongold ‘550 fails to disclose or suggest polyhydric alcohols, it also fails to teach or suggest to those of ordinary skill in the art the

dimerdiol esters of the present invention". This argument is not persuasive, as Akrongold is not relied on to teach polyhydric alcohols. As stated on numerous occasions above, Ansmann teaches polyhydric alcohols.

Appellant argues, "the disclosure of a laundry list of esters of fatty acids that also includes the Appellants dimerdiol does not per se render the instant invention obvious. Ansmann '978 lists and discloses under the heading 'Oils" at column 4 several generic esters of fatty acids". This argument is not persuasive. First, the list of "Oils" in column 4 of Ansmann is not exhaustive. Second, Ansmann teaches these oils as interchangeable. Thus, substituting one for the other would have been within the level of skill of the artisan.

Appellant argues, "There is no particular attention or treatment of dimerdiol ester. In fact, as noted at col. 4, line 5, sensorial properties are not properties associated with oil materials including a dimerdiol ester". This argument is not persuasive. Ansmann teach dimer diol esters, thereby calling attention to dimer diol esters. A teaching is a teaching, whether or not a specific reference is essential to the inventive composition.

Appellant argues that "Ansmann '978 seems to actually teach away from the use of dimerdiol esters in cosmetics. Ansmann '978 is more concerned with triglycerides based on C6-C10 fatty acid". This argument is not persuasive. This does not teach away from dimerdiol esters in cosmetics. Actually, in Col. 4 of Ansmann, the dimer diols are taught as suitable oils for use in their invention, a cosmetic composition.

Appellant argues, "The dimerdiol ester of the instant invention has superior properties over the triglycerides based on C6-C10 fatty acid". This argument is not persuasive. First, it is respectfully pointed out that superior properties are not necessarily unexpected.

Second, it is respectfully pointed out that the instant specification does not provide data that is commensurate in scope with the instant claims (i.e., dimerdiol esters of a monocarboxylic acid having 10 to 32 carbon atoms and/or a dimerdiol ester of a dicarboxylic acid, which encompass an incredible number of compounds). Third, it is respectfully pointed out that Appellant has not provided comparative data with the closest prior art or data that is of both statistical and practical significant. The Examiner respectfully directs Appellant to the guidelines for showing unexpected results. It is applicant's burden to demonstrate unexpected results over the closest prior art. See MPEP 716.02, also 716.02 (a) - (g). Furthermore, the unexpected results should be demonstrated with evidence that the differences in results are in fact unexpected and unobvious and of both statistical and practical significance. *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992). Moreover, evidence as to any unexpected benefits must be "clear and convincing" *In re Lohr*, 137 USPQ 548 (CCPA 1963), and be of a scope reasonably commensurate with the scope of the subject matter claimed, *In re Linder*, 173 USPQ 356 (CCPA 1972).

Appellant argues, "Akrongold '550 also discloses many other materials such as fatty acids, fatty alcohols and other oils. . .The dimerdiol ester of the present invention. . .exhibits higher effects than the other oil material disclosed in Akrongold. . .the esters of Akrongold '550 are used as oils and not as emulsions in combination with urea to produce a powder product. In contrast, the esters in Ansmann '978 are used as oils for emulsion with water to produce an o/w emulsion. Further, the cosmetic composition of Ansmann '978 is completely different from the cosmetic of Akrongold '550". This argument is not persuasive, as Akrongold is merely relied upon to teach cosmetically acceptable carbon chain lengths of fatty acid esters. It is further

respectfully pointed out that it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Ansmann generally teach fatty acids. Therefore, it is within the level of skill of the artisan to discover the optimum carbon chain length of the fatty acids for cosmetic use.

Appellant argues, “one of ordinary skill in the art would not be motivated to arrive at the instant invention from the teachings of Akdrongold ‘550 in combination with Ansmann ‘978 since the superiority of esters of fatty acids and of the fatty acid used for producing the esters is not disclosed or suggested. . .For example, the dimerdiol ester used in the present invention exhibits higher effects than the other oil materials”. This argument is not persuasive, as it is not commensurate in scope with the instant claims. For the reasons stated above, Appellant has not provided showings of unexpected results.

In response to Applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Regarding Bernhardt, Appellant argues, “these esters are also outside the scope of the present invention. Thus, while Bernhardt et al. may also teach rosin, its disclosure when combined with the remaining cited art references does not cure the above noted deficiencies of

Ansmann '978 and Akrongold '550". This argument is not persuasive. As pointed out in the above rejection, Bernhardt et al. specifically teach rosin as having beneficial properties, i.e., increasing the viscosity of emulsions. Thus, teaching the monocarboxylic acids of the combined references as rosin would have been within the skill of the artisan because of the expectation of achieve a thickened product. See the above rejection.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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April 22, 2004

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